

ABSTRACT OF THE DISCLOSURE

The image data is initially processed in a manner that is similar to that used to convert the image data into 3-layer mixed raster content format. After the image data is initially processed through a first stage of the three-layer segmentation process, rather than completing the segmentation into foreground and background planes, the image data is analyzed to identify regions having similar image characteristics. These regions are grouped together in cluster if they share color characteristics and are spatially close. The clusters are then sorted according to their size, and placed into a binary foreground plane based on one or more color characteristics. Each cluster gathered into a binary foreground plane having the same color as the color of the cluster.